

## COMPLAINT

## **TABLE OF ACRONYMS**

CAA:	Clean Air Act
CO:	Carbon Monoxide
DOC:	Diesel Oxidization Catalyst
DPF:	Diesel Particulate Filter
ECU:	Electronic Control Unit
EGR:	Exhaust Gas Recirculation
EPA:	United States Environmental Protection Agency
NAC:	NO <sub>x</sub> Adsorber Catalyst
NMHCs:	Non-Methane Hydrocarbons
NO <sub>x</sub> :	Nitrogen Oxides
OBD:	On-Board Diagnostics
OEM:	Original Equipment Manufacturer
PM:	Particulate Matter
SCR:	Selective Catalytic Reduction

The United States of America (“United States”), by authority of the Attorney General of the United States and at the request of the Administrator of the United States Environmental Protection Agency (“EPA”), files this Complaint and alleges as follows:

## **I. NATURE OF THE ACTION**

1. This is a civil action brought under Sections 203, 204, and 205 of the Clean Air Act (“CAA”), 42 U.S.C. §§ 7522–7524, seeking injunctive relief and the assessment of civil penalties against Gear Box Z, Inc. (“Gear Box Z” or “Defendant”) for violations of the CAA related to Defendant’s manufacture and sale of aftermarket products that bypass, defeat, or render inoperative emission controls installed on motor vehicles or motor vehicle engines, in violation of the CAA.

## **II. JURISDICTION**

2. This Court has jurisdiction over the subject matter of and the parties to this action pursuant to Sections 204 and 205 of the CAA, 42 U.S.C. §§ 7523 and 7524, and 28 U.S.C. §§ 1331 (Federal Question), 1345 (United States as Plaintiff), and 1355 (Fine, Penalty, or Forfeiture).

3. Venue is proper in the District of Arizona pursuant to 28 U.S.C. §§ 1391(b)(2), 1391(c)(2), and 1395(a), as well as Sections 204 and 205 of the CAA, 42 U.S.C. §§ 7523 and 7524, because it is a judicial district in which

Defendant is located, resides, is doing business, and/or in which a substantial part of the alleged violations in the Complaint occurred.

### **III. DEFENDANT**

4. Gear Box Z, Inc. is an Arizona corporation.

5. The registered address for Gear Box Z is 55 North Pioneer Street, #2246, Colorado City, Arizona.

6. Gear Box Z is a “person” within the meaning of Section 302(e) of the CAA, 42 U.S.C. § 7602(e).

### **IV. BACKGROUND**

7. This action arises under Title II of the CAA, as amended, 42 U.S.C. §§ 7521-7590, and the regulations promulgated thereunder relating to the control of emissions of air pollution from motor vehicles and motor vehicle engines.

#### **A. Statutory and Regulatory Objectives**

8. In creating the CAA, Congress found that “the increasing use of motor vehicles . . . has resulted in mounting dangers to the public health and welfare . . . .” 42 U.S.C. § 7401(a)(2). Congress’s purposes in creating the CAA were “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population,” and “to initiate and accelerate a national research and development

program to achieve the prevention and control of air pollution.” 42 U.S.C. § 7401(b)(1)–(2).

9. “Motor vehicle” is defined in the CAA as “any self-propelled vehicle designed for transporting persons or property on a street or highway.” 42 U.S.C. § 7550(2); 40 C.F.R. § 85.1703.

10. Title II of the CAA and the regulations promulgated thereunder establish standards for the emissions of air pollutants from motor vehicles and motor vehicle engines that “cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a)(1). These pollutants include nitrogen oxides (“NO<sub>x</sub>”), particulate matter (“PM”), non-methane hydrocarbons (“NMHCs”), and carbon monoxide (“CO”). 42 U.S.C. § 7521(a)(3)(A).

11. EPA has also established National Ambient Air Quality Standards for certain pollutants, including ozone, NO<sub>x</sub>, PM, and CO. See 40 C.F.R. §§ 50.1–50.19.

12. Ozone is a highly reactive gas that is formed in the atmosphere from other pollutants, including pollutants emitted from motor vehicles.

13. PM is a form of air pollution composed of microscopic solids and liquids suspended in air. PM is emitted directly from motor vehicles and is also formed in the atmosphere from other pollutants, including pollutants emitted

from motor vehicles.

14. NO<sub>x</sub> and NMHCs are reactive gases that contribute to the formation of PM and ozone.

15. Exposure to ozone and PM is linked to respiratory and cardiovascular health problems as well as premature death. Children, older adults, people who are active outdoors (including outdoor workers), and people with heart or lung disease are particularly at risk for health effects related to ozone or PM exposure.

16. CO is a highly toxic gas that forms when the carbon in fuel does not burn completely. CO is harmful to human health because it reduces oxygen delivery to the body's organs and tissues. CO can cause headaches, dizziness, vomiting, nausea, loss of consciousness, and death. Long-term exposure to CO has been associated with an increased risk of heart disease.

**B. Acts Prohibited by Section 203(a)(3)(B) of the Clean Air Act**

17. Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), prohibits

any person to manufacture or sell, or offer to sell, or install any part or component intended for use with, or as a part of, any motor vehicle or motor vehicle engine, where a principal effect of the part or component is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with regulations under this subchapter, and where the person knows or should know that such part or component is being offered for sale or installed for such use or put to such use.

42 U.S.C. § 7522(a)(3)(B). This is generally known as the “defeat device prohibition.”

18. Any person violating Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), is subject to injunctive relief. 42 U.S.C. § 7523.

19. Any person violating Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), is subject to civil penalties of up to \$3,750 for each violation occurring on or after January 13, 2009, through November 2, 2015, and up to \$4,735 for each violation occurring after November 2, 2015, and assessed on or after February 6, 2019. 42 U.S.C. § 7524(a). See 40 C.F.R. § 19.4 (2018) and Civil Monetary Penalty Inflation Adjustment Rule, 84 Fed. Reg. 2056, 2059 (Feb. 6, 2019) (adjusting penalty values found in the CAA for inflation); 84 Fed. Reg. 5955-01 (Feb. 25, 2019) (correcting the effective date of the Civil Monetary Penalty Inflation Adjustment Rule).

20. Each part or component manufactured, sold, offered for sale, or installed in violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), is a separate violation. 42 U.S.C. § 7524(a).

**C. EPA’s Certificate of Conformity Program for New Motor Vehicles and Motor Vehicle Engines**

21. Manufacturers of new motor vehicles or motor vehicle engines

must apply for and obtain a certificate of conformity from EPA to sell, offer to sell, or introduce or deliver for introduction into commerce any new motor vehicle or motor vehicle engine in the United States. 42 U.S.C. § 7522(a)(1).

22. To obtain a certificate of conformity, the original equipment manufacturer (“OEM”) must demonstrate that the motor vehicle or motor vehicle engine will conform to established emissions standards for NO<sub>x</sub>, PM, NMHCs, CO, and other pollutants during the motor vehicle or motor vehicle engine’s useful life. 42 U.S.C. § 7525(a)(2); see 40 C.F.R. §§ 86.007-30(a)(1)(i), 86.1848-01(a)(1).

23. The certificate of conformity application must include a description of the vehicle’s “emission control system and fuel system components.” 40 C.F.R. § 86.094-21(b)(1); see also 40 C.F.R. § 86.1844-01(d)–(e).

24. Once issued by EPA, a certificate of conformity covers only those new motor vehicles or motor vehicle engines that conform in all material respects to the specifications provided to EPA in the certificate of conformity application for such vehicles or engines. 40 C.F.R. § 86.1848-01(c)(6).

**D. Emissions-Related Elements of Design**

25. An “element of design” is “any control system (i.e., computer software, electronic control system, emission control system, computer logic),

and/or control system calibrations, and/or the results of systems interaction, and/or hardware items on a motor vehicle or motor vehicle engine.” 40 C.F.R. § 86.1803-01 (General Compliance Provisions for Control of Air Pollution from New and In-Use Light-Duty Vehicles, Light-Duty Trucks, and Heavy-Duty Vehicles).

26. An “emission control system” is a “unique group of emission control devices, auxiliary emission control devices, engine modifications and strategies, and other elements of design designated by the Administrator [of EPA] used to control exhaust emissions of a vehicle.” Id.

27. OEMs install a variety of software and hardware elements of design in motor vehicles and motor vehicle engines to monitor and control emissions of pollutants in order to comply with the CAA and regulations promulgated thereunder. These elements of design, which collectively make up the emission control system, are referred to in this Complaint as “Emissions-Related Elements of Design.”

28. Modern motor vehicles are equipped with Electronic Control Units (“ECUs”), which are on-board computer systems that run the software that monitors and controls vehicle operations, including the operation of Emissions-Related Elements of Design. Emissions-Related Elements of Design generally include both the specific hardware described below, and the ECU or ECUs and

software that control operation of that hardware.

29. Exhaust Gas Recirculation System (“EGR System”). Diesel engines produce high combustion temperatures that result in the production of NO<sub>x</sub>. An Exhaust Gas Recirculation System (“EGR System”) reduces NO<sub>x</sub> emissions by recirculating a portion of engine exhaust gas back through the engine’s cylinders, thereby lowering the combustion temperature and reducing NO<sub>x</sub> production. The EGR System is an Emissions-Related Element of Design, and is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522 (a)(3)(B).

**i. Aftertreatment Systems**

30. “Aftertreatment” means any “system, component, or technology mounted downstream of the exhaust valve . . . whose design function is to reduce emissions in the engine exhaust before it is exhausted to the environment.” 40 C.F.R. § 1068.30.

31. Aftertreatment systems consist of hardware installed in the stock exhaust system, as well as software that runs on one or more ECUs and directs operation of the hardware components. Diesel Particulate Filters (“DPFs”), Diesel Oxidation Catalysts (“DOCs”), Selective Catalytic Reduction (“SCR”) Systems, and NO<sub>x</sub> Adsorber Catalysts (“NACs”) are Aftertreatment

systems that can be used alone, or in combination with each other or with other Emissions-Related Elements of Design, to control the emission of pollutants.

32. Diesel Particulate Filter (“DPF”). A Diesel Particulate Filter (“DPF”) is a filter that captures soot from engine exhaust, thereby decreasing PM emissions. By design, soot that collects in the DPF is periodically burned off by elevated exhaust temperatures in a process referred to as active or passive regeneration. The DPF is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), and also an Emissions-Related Element of Design.

33. Diesel Oxidation Catalyst (“DOC”). A Diesel Oxidation Catalyst (“DOC”) is a precious-metal coated, flow-through honeycomb structure. As exhaust gas passes through the DOC, the coating of precious metal causes a catalytic reaction that breaks down CO and NMHCs in the exhaust into their less harmful components. The DOC is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), and also an Emissions-Related Element of Design.

34. Selective Catalytic Reduction (“SCR”). A Selective Catalytic Reduction (“SCR”) system (a/k/a “catalytic converter or “catalyst”) reduces NO<sub>x</sub>

emissions by chemically converting exhaust gas that contains NO<sub>x</sub> into nitrogen and water through the injection of diesel exhaust fluid, typically composed of urea. The SCR is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), and also an Emissions-Related Element of Design.

35. NO<sub>x</sub> Adsorber Catalyst (“NAC”). A NO<sub>x</sub> Adsorber Catalyst (“NAC”) (a/k/a “NO<sub>x</sub> trap”) reduces NO<sub>x</sub> emissions by chemically adsorbing NO<sub>x</sub> from exhaust gas. The NAC is a “device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), and also an Emissions-Related Element of Design.

## **ii. Onboard Diagnostics System (“OBD”)**

36. The CAA requires OEMs to install an On-Board Diagnostics system (“OBD”) on motor vehicles. 42 U.S.C. § 7521(m). The OBD monitors, detects, reports, and records malfunctions of monitored Emissions-Related Elements of Design and other components through a network of sensors installed throughout the motor vehicle and motor vehicle engine. 40 C.F.R. §§ 86.007-17, 86.010-18, 86.1806-05. The OBD monitors sensor inputs for malfunction or deterioration that could cause a vehicle to fail to comply with CAA emission

standards.

37. CAA regulations require that when the OBD detects a malfunction of an emissions-related system or component, it must illuminate the vehicle's malfunction indicator light (a/k/a "check engine light") on the dashboard. See 40 C.F.R. § 86.1806-05(b)-(d).

38. CAA regulations require that once the malfunction indicator light has been illuminated, the OBD must record a diagnostic trouble code. 40 C.F.R. § 86.1806-05(e). The OBD stores diagnostic trouble codes that service personnel can read in order to diagnose and repair a vehicle, and that government inspectors can download to verify a vehicle's compliance with emissions standards.

39. The OBD may also prompt a driver to correct a problem by altering vehicle performance, such as by putting the vehicle into "limp-home mode." In limp-home mode, the ECU significantly downgrades engine performance to alert the driver that there is a problem with the emission control system, permitting the vehicle to be driven (albeit slowly) to a service station for repair.

40. The OBD is a "device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations" within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C.

§ 7522(a)(3)(B), and also an Emissions-Related Element of Design.

**iii. Certified Stock Calibrations**

41. OEMs install a suite of pre-set software calibrations for operational parameters (“Certified Stock Calibrations”); these calibrations control all aspects of vehicle and engine operation including combustion, performance, and operation of EGR and Aftertreatment systems. The Certified Stock Calibrations for a particular engine or vehicle operate together to control the formation and emission of pollutants. OEMs program the ECUs with Certified Stock Calibrations and disclose them to EPA on their application for a certificate of conformity for each vehicle model, because the Certified Stock Calibrations are an important part of a motor vehicle’s overall emissions control strategy.

42. The types of Certified Stock Calibrations relevant to this Complaint include but are not limited to:

- a. calibrations that affect the operation of Aftertreatment systems (the DPF, DOC, SCR, or NAC);
- b. calibrations that affect engine combustion, performance, and operation (e.g., air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pressure, and fuel injection pulse width and temperature (the EGR)), which are critical elements of the OEM’s strategy to control the formation of pollutants in the engine; and

c. calibrations that affect OBD detection, warning and recording of malfunctions.

43. Each of the above-listed types of Certified Stock Calibration is an “element of design installed on or in a motor vehicle or motor vehicle engine in compliance with [CAA] regulations” within the meaning of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), and also an Emissions-Related Element of Design.

**E. Aftermarket Products that Bypass, Defeat, or Render Inoperative Emissions-Related Elements of Design**

44. Third parties, including Defendant, manufacture, sell, and offer for sale products for use with existing motor vehicles that are designed to enhance the vehicle’s power, performance, or fuel economy. In some cases, these products achieve their purpose through a design that bypasses, defeats, or renders inoperative OEM-installed Emissions-Related Elements of Design. These products fall into two broad categories: hardware and software.

**i. Aftermarket Hardware Products**

45. Some aftermarket products are designed to physically interfere with, or remove, Emissions-Related Elements of Design through the addition of new or replacement hardware to a motor vehicle. The following types of aftermarket hardware products are relevant to this Complaint:

a. EGR Delete Hardware Products. Some aftermarket hardware products interfere with or remove (“delete”) the EGR System. Examples of such products include “blocker plates,” “EGR valve deletes,” and “EGR cooler deletes.” These products are collectively referred to in this Complaint as “EGR Delete Hardware Products.”

b. Exhaust Replacement Pipes. Some aftermarket hardware products physically alter or remove some or all of a vehicle’s Aftertreatment systems by changing, removing, or replacing essential physical elements of the DPF, DOC, SCR, or NAC. This often involves removing the vehicle’s entire exhaust system, in which the Aftertreatment systems are installed, and installing a replacement with no Aftertreatment. Examples include “straight pipes” and “race pipes.” These products are collectively referred to in this Complaint as “Exhaust Replacement Pipes.”

c. DPF Emulators. Some aftermarket hardware products are designed to emulate signals sent from the DPF system to the vehicle’s OBD system, which can prevent the generation of diagnostic trouble codes, prevent the malfunction indicator light from illuminating, and prevent the OBD from putting the vehicle into “limp-home mode” when the vehicle’s DPF is removed or malfunctions. These products are referred to in this Complaint as “DPF Emulators.”

**ii. Aftermarket Software Products (a/k/a “Tunes”)**

46. Other aftermarket products consist of software that is uploaded into a motor vehicle’s ECUs and alters or overwrites the vehicle’s Certified Stock Calibrations. An individual piece of such software is commonly referred to as a “Tune,” derived from its intended purpose of “tuning” the vehicle’s performance.

47. The following general categories of Tunes modify or replace Certified Stock Calibrations in ways relevant to this Complaint:

a. Tunes that modify or replace Certified Stock Calibrations relating to Aftertreatment systems: the DPF, DOC, SCR, or NAC, as well as signals or records related to these systems.

b. Tunes that modify or replace Certified Stock Calibrations related to engine combustion, performance, and operation (e.g., air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pressure, and fuel injection pulse width and temperature).

c. Tunes that modify or replace Certified Stock Calibrations related to OBD functions in order to prevent the generation of diagnostic trouble codes, prevent the malfunction indicator light from illuminating, and prevent the OBD from putting the vehicle into “limp-home mode.”

48. A single Tune can change or overwrite multiple types of Certified Stock Calibrations. For example, a Tune that deletes EGR System functions will also typically modify OBD functions so that the EGR System deletion will not be detected.

49. Multiple Tunes are often bundled together and sold as a single product.

50. Products that include Tunes that bypass, defeat, or render inoperative Emissions-Related Elements of Design are collectively referred to in this Complaint as “Defeat Tune Products.”

## **V. GENERAL ALLEGATIONS**

51. Defendant manufactures, sells, and/or offers to sell products intended for use in “motor vehicles” as that term is defined by the CAA, 42 U.S.C. § 7550(2), and regulations promulgated thereunder at 40 C.F.R. § 85.1703.

52. Defendant sells and offers to sell these products over the internet through its website, through telephone orders, and through sales to other retailers that then market the products to consumers.

53. As of the date of the filing of this Complaint, Defendant continues to manufacture, sell, and offer for sale products with a principal effect of bypassing, defeating, or rendering inoperative an element of design, including

but not limited to the Emissions-Related Elements of Design described in Paragraphs 25-43 above, installed in or on a motor vehicle or motor vehicle engine in compliance with Subchapter II of the Clean Air Act.

## **VI. FIRST CLAIM FOR RELIEF**

### **Manufacture, Sale, or Offer for Sale of EGR Delete Hardware**

### **Products in Violation of Section 203(a)(3)(B) of the Clean Air Act**

54. The United States re-alleges Paragraphs 1-53 above as if fully set forth herein.

55. Between January 1, 2015, and April 24, 2017, Defendant manufactured, sold, or offered for sale numerous EGR Delete Hardware Products. Upon information and belief, Defendant continues to manufacture, sell, or offer to sell such EGR Delete Hardware Products.

56. The EGR Delete Hardware Products manufactured, sold, or offered for sale by Defendant include block plates that interfere with the recirculation of exhaust gas back into the engine combustion chamber.

57. As of the date of the filing of this Complaint, Defendant continues to sell or offer for sale EGR Delete Hardware Products.

58. Each EGR Delete Hardware Product that Defendant manufactured, sold, or offered for sale is, and at all relevant times was, intended for use with certified motor vehicles and motor vehicle engines, including

Powerstroke engines in Ford vehicles.

59. A principal effect of each EGR Delete Hardware Product that Defendant manufactured, sold, or offered for sale is, and at all relevant times was, the bypassing, defeating, or rendering inoperative a motor vehicle's EGR System.

60. Defendant knew or should have known that each EGR Delete Hardware Product it manufactured, sold, or offered for sale was being offered for sale or installed for such use or put to such use as described in Paragraph 59.

61. Each unit of each EGR Delete Hardware Product that Defendant manufactured, sold, or offered for sale, is a separate violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

62. Unless enjoined, Defendant is likely to continue to manufacture, sell, and offer for sale the EGR Delete Hardware Products described in this Claim for Relief.

63. Defendant is liable to the United States for injunctive relief and civil penalties of up to \$3,750 for each violation of Section 203(a)(3)(B) described in Paragraphs 54-61 occurring on or after January 13, 2009, through November 2, 2015, and injunctive relief and civil penalties of up to \$4,735 for each violation of Section 203(a)(3)(B) occurring after November 2, 2015, and assessed on or after February 6, 2019, in accordance with Sections 204(a) and

205(a) of the CAA, 42 U.S.C. §§ 7523(a) and 7524(a). 40 C.F.R. § 19.4 (2018) and Civil Monetary Penalty Inflation Adjustment Rule, 84 Fed. Reg. 2056, 2059 (Feb. 6, 2019) (adjusting penalty values found in the CAA for inflation); 84 Fed. Reg. 5955-01 (Feb. 25, 2019) (correcting the effective date of the Civil Monetary Penalty Inflation Adjustment Rule).

## **VII. SECOND CLAIM FOR RELIEF**

### **Sale or Offer for Sale of Exhaust Replacement Pipes in Violation of Section 203(a)(3)(B) of the Clean Air Act**

64. The United States re-alleges Paragraphs 1-53 above as if fully set forth herein.

65. Between January 1, 2015, and April 24, 2017, Defendant sold or offered for sale numerous Exhaust Replacement Pipes. Upon information and belief, Defendant continues to manufacture, sell, or offer to sell Exhaust Replacement Pipes.

66. As of the date of the filing of this Complaint, Defendant continues to sell or offer for sale Exhaust Replacement Pipes.

67. The Exhaust Replacement Pipes that Defendant sold or offered for sale are, and at all relevant times were, intended for use with certified motor vehicles and motor vehicle engines, including Powerstroke engines in Ford

vehicles, Duramax engines in GM vehicles, and Cummins engines in Dodge vehicles.

68. A principal effect of each Exhaust Replacement Pipe that Defendant sold or offered for sale is, and at all relevant times was, to replace, bypass, defeat, or render inoperative a motor vehicle's DPF, DOC, SCR, or NAC (i.e., some or all of the vehicle's Aftertreatment systems).

69. Defendant knew or should have known that each Exhaust Replacement Pipe it sold or offered for sale was being offered for sale or installed for such use or put to such use as described in Paragraph 68.

70. Each unit of each Exhaust Replacement Pipe that Defendant sold or offered for sale is a separate violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

71. Unless enjoined, Defendant is likely to continue to manufacture, sell, and offer for sale the Exhaust Replacement Pipes described in this Claim for Relief.

72. Defendant is liable to the United States for injunctive relief and civil penalties of up to \$3,750 for each violation of Section 203(a)(3)(B) described in Paragraphs 64-70 above occurring on or after January 13, 2009, through November 2, 2015, and injunctive relief and civil penalties of up to \$4,735 for each violation of Section 203(a)(3)(B) occurring after November 2,

2015, and assessed on or after February 6, 2019, in accordance with Sections 204(a) and 205(a) of the CAA, 42 U.S.C. §§ 7523(a) and 7524(a). 40 C.F.R. § 19.4 (2018) and Civil Monetary Penalty Inflation Adjustment Rule, 84 Fed. Reg. 2056, 2059 (Feb. 6, 2019) (adjusting penalty values found in the CAA for inflation); 84 Fed. Reg. 5955-01 (Feb. 25, 2019) (correcting the effective date of the Civil Monetary Penalty Inflation Adjustment Rule).

### **VIII. THIRD CLAIM FOR RELIEF**

#### **Manufacture, Sale, or Offer for Sale of DPF Emulators in Violation of Section 203(a)(3)(B) of the Clean Air Act**

73. The United States re-alleges Paragraphs 1-53 above as if fully set forth herein.

74. Between January 1, 2015, and April 24, 2017, Defendant manufactured, sold, or offered for sale numerous DPF Emulators.

75. As of the date of the filing of this Complaint, Defendant continues to sell or offer for sale DPF Emulators.

76. Each DPF Emulator that Defendant manufactured, sold, or offered for sale is, and at all relevant times was, intended for use with certified motor vehicles and motor vehicle engines, including Cummins engines in Dodge vehicles.

77. A principal effect of each DPF Emulator that Defendant manufactured, sold, or offered for sale is, and at all relevant times was, the bypassing, defeating, or rendering inoperative a motor vehicle's DPF System.

78. Defendant knew or should have known that each DPF Emulator it manufactured, sold, or offered for sale was being offered for sale or installed for such use or put to such use as described in Paragraph 77.

79. Each unit of each DPF Emulator that Defendant manufactured, sold, or offered for sale, is a separate violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

80. Unless enjoined, Defendant is likely to continue to manufacture, sell, and offer for sale the Exhaust Replacement Pipes described in this Claim for Relief.

81. Defendant is liable to the United States for injunctive relief and civil penalties of up to \$3,750 for each violation of Section 203(a)(3)(B) described in Paragraphs 73-79 occurring on or after January 13, 2009, through November 2, 2015, and injunctive relief and civil penalties of up to \$4,735 for each violation of Section 203(a)(3)(B) occurring after November 2, 2015, and assessed on or after February 6, 2019, in accordance with Sections 204(a) and 205(a) of the CAA, 42 U.S.C. §§ 7523(a) and 7524(a). 40 C.F.R. § 19.4 (2018) and Civil Monetary Penalty Inflation Adjustment Rule, 84 Fed. Reg. 2056, 2059

(Feb. 6, 2019) (adjusting penalty values found in the CAA for inflation); 84 Fed. Reg. 5955-01 (Feb. 25, 2019) (correcting the effective date of the Civil Monetary Penalty Inflation Adjustment Rule).

## **IX. FOURTH CLAIM FOR RELIEF**

### **Manufacture, Sale, or Offer for Sale of Defeat Tune Products that Bypass, Defeat, or Render Inoperative Emissions-Related Elements of Design in Violation of Section 203(a)(3)(B) of the Clean Air Act**

82. The United States re-alleges Paragraphs 1-53 above as if fully set forth herein.

83. Between January 1, 2015, and April 24, 2017, Defendant manufactured, sold, or offered for sale numerous Defeat Tune Products. Upon information and belief, Defendant continues to manufacture, sell, or offer to sell such Defeat Tune Products.

84. The Defeat Tune Products that Defendant manufactured, sold, or offered for sale change or overwrite the following types of Certified Stock Calibrations:

a. Certified Stock Calibrations relating to Aftertreatment systems: the DPF, DOC, SCR, or NAC, as well as signals or records related to these systems.

b. Certified Stock Calibrations related to engine

combustion, performance and operation such as temperature, air-fuel ratio, fuel injection timing, fuel quantity, fuel injection pressure, and fuel injection pulse width.

c. Certified Stock Calibrations related to OBD functions in order to prevent the generation of diagnostic trouble codes, prevent the malfunction indicator light from illuminating, and prevent the OBD from putting the vehicle into “limp-home mode.”

85. The Defeat Tune Products that Defendant manufactured, sold, or offered for sale are intended for use with certified motor vehicles and motor vehicle engines, including Powerstroke engines in Ford vehicles, Duramax engines in GM vehicles, and Cummins engines in Dodge vehicles.

86. A principal effect of each Defeat Tune Product that Defendant sold or offered for sale is, and at all relevant times was, to bypass, defeat, or render inoperable Emissions-Related Elements of Design by modifying or overwriting a motor vehicle’s Certified Stock Calibrations relating to the following:

- a. the Aftertreatment systems (the DPF, DOC, SCR, or NAC);
- b. engine combustion, performance, and operation (e.g., temperature, air-fuel ratio, fuel injection timing, fuel quantity, fuel injection

pressure, and fuel injection pulse width); and

c. OBD system functions.

87. Defendant knew or should have known that each Defeat Tune Product it manufactured, sold, or offered for sale was being offered for sale or installed for such use or put to such use as described in Paragraph 86.

88. Each unit of each Defeat Tune Product that Defendant manufactured, sold, or offered for sale is a separate violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B). 42 U.S.C. § 7524(a).

89. Unless enjoined, Defendant is likely to continue to manufacture, sell, and offer for sale the Defeat Tune Products described in this Claim for Relief.

90. Defendant is liable to the United States for injunctive relief and civil penalties of up to \$3,750 for each violation of Section 203(a)(3)(B) described in Paragraphs 82-88 above occurring on or after January 13, 2009, through November 2, 2015, and injunctive relief and civil penalties of up to \$4,735 for each violation of Section 203(a)(3)(B) occurring after November 2, 2015, and assessed on or after February 6, 2019, in accordance with Sections 204(a) and 205(a) of the CAA, 42 U.S.C. §§ 7523(a) and 7524(a). 40 C.F.R. § 19.4 (2018) and Civil Monetary Penalty Inflation Adjustment Rule, 84 Fed. Reg. 2056, 2059 (Feb. 6, 2019) (adjusting penalty values found in the CAA for

inflation); 84 Fed. Reg. 5955-01 (Feb. 25, 2019) (correcting the effective date of the Civil Monetary Penalty Inflation Adjustment Rule).

**X. RELIEF REQUESTED**

WHEREFORE, the United States respectfully requests that this Court:

1. Preliminarily and permanently enjoin Defendant from manufacturing, selling, offering to sell, or installing products intended for use with a motor vehicle or motor vehicle engine where a principal effect of such product is to bypass, defeat, or render inoperative any device or element of design installed on or in a motor vehicle or motor vehicle engine in compliance with Title II of the CAA;
2. Assess civil penalties against Defendant for each violation of Section 203(a)(3)(B) of the CAA, 42 U.S.C. § 7522(a)(3)(B), in the amount of up to \$3,750 for each violation occurring after August 15, 2013 through November 2, 2015, and up to \$4,735 for each violation occurring after November 2, 2015;
3. Order Defendant to take other appropriate actions to remedy, mitigate, and offset the harm caused by its CAA violations; and

4. Award such other relief as the Court may deem just and proper.

Respectfully submitted,

JEFFREY BOSSERT CLARK  
Assistant Attorney General  
Environment & Natural Resources Division  
United States Department of Justice

s/ Steven D. Ellis  
STEVEN D. ELLIS  
Senior Counsel  
Environmental Enforcement Section  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611, Ben Franklin Station  
Washington, D.C. 20044-7611

UNITED STATES DISTRICT COURT  
DISTRICT OF ARIZONA

## Civil Cover Sheet

This automated JS-44 conforms generally to the manual JS-44 approved by the Judicial Conference of the United States in September 1974. The data is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. The information contained herein neither replaces nor supplements the filing and service of pleadings or other papers as required by law. This form is authorized for use only in the District of Arizona.

**The completed cover sheet must be printed directly to PDF and filed as an attachment to the Complaint or Notice of Removal.**

**Plaintiff(s): United States of America**

**Defendant(s): Gear Box Z, Inc.**

County of Residence: Outside the State of Arizona

County of Residence: Mohave

County Where Claim For Relief Arose: Mohave

Plaintiff's Atty(s):

Defendant's Atty(s):

**Steven David Ellis**  
**United States Department of Justice**  
**P.O. Box 7611, Ben Franklin Station**  
**Washington, DC 20044**  
**202-514-3163**

**Matthew I. Barlow**  
**Barlow Law Firm**  
**3285 S. Hwy 389, #101**  
**Fredonia, Arizona 86022**  
**602-461-8863**

II. Basis of Jurisdiction:

**1. U.S. Government Plaintiff**

III. Citizenship of Principal  
Parties (Diversity Cases Only)

Plaintiff:- N/A

Defendant:- N/A

IV. Origin :

**1. Original Proceeding**

V. Nature of Suit:

**893 Environmental Matters**

VI. Cause of Action:

**42 U.S.C. Section 7522(a)(3)(B), illegal manufacture and sale of  
aftermarket products that bypass, defeat, or render inoperative emission  
controls installed on motor vehicles or motor vehicle engines.**

VII. Requested in Complaint

Class Action: No

Dollar Demand:

Jury Demand: No

VIII. This case is not related to another case.

**Signature: /s Steven D. Ellis**

**Date: 1/3/2020**

**If any of this information is incorrect, please go back to the Civil Cover Sheet Input form using the *Back* button in your browser and change it. Once correct, save this form as a PDF and include it as an attachment to your case opening documents.**

Revised: 01/2014